

1. (Currently Amended) A resist polymer at least having a repeating unit having a structure which is decomposed by an acid to become soluble in an alkali developer and a repeating unit having a polar group to enhance to a substrate, wherein said resist polymer is produced by radical copolymerization with retaining a solution containing polymerizable monomers and a solution containing a polymerization initiator in respectively independent storage tanks and supplying into a polymerization system continuously or intermittently, and characterized in that a peak area of a high molecular weight component (high polymer) with molecular weight of 100,000 or more is 0.1% or less based on an entire peak area in a molecular weight distribution determined by gel permeation chromatography (GPC).

Claims 2-9 (Canceled)

10. (New) The resist polymer defined in Claim1, wherein the feed time for the solution containing polymerizable monomers and the solution containing a polymerization initiator is defined as ranging between about 1 and 10 hours.